



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/421,422	10/19/1999	PEHR B. HARBUSY	8600-0197.30	4130
24353	7590	02/02/2006	EXAMINER	
BOZICEVIC, FIELD & FRANCIS LLP 1900 UNIVERSITY AVENUE SUITE 200 EAST PALO ALTO, CA 94303			TRAN, MY CHAU T	
		ART UNIT	PAPER NUMBER	
		1639		

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/421,422	HARBURY ET AL.
	Examiner MY-CHAU T. TRAN	Art Unit 1639

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 05 October 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,3-10,15 and 16 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,3-10,15 and 16 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 19 October 1999 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/05/2005 has been entered.

Application and Claims Status

2. Applicant's amendment and response filed 09/09/2005 is acknowledged and entered. Claims 11-14 have been cancelled. Claims 1, 5, 8, 15, and 16 have been amended.

3. The amendment filed on 03/29/2005: cancelled claim 2; amended claims 1, 3, 4, 5, 6, and 9; and added claims 15 and 16.

4. Claims 1, 3-10, 15, and 16 are pending.

Priority

5. This instant application claims benefit to a provisional application of 60/104,744 filed 10/19/1998. This instant application is granted the benefit of priority for 60/104,744 under 35 U.S.C 119(e).

6. Claims 1, 3-10, 15, and 16 are under consideration in this Office Action.

7. *The instant invention recites a method of tag-directed synthesis of a plurality of compounds.*

The method comprises the steps of (a) forming a first group of subsets of nucleic acid tags for participating in a first synthetic reaction step by contacting said nucleic acid tags with a plurality of first immobilized nucleotide sequences, each designed to capture a subset of tags by hybridization between one of the first hybridization sequences and the first immobilized sequence; (b) carrying out the first synthetic step by reacting the chemical reaction sites in each of the subsets formed in (a) with a selected one of a plurality of first reagents thereby to convert the chemical reaction site in each tag to a reagent-specific compound intermediate on the nucleic acid tag in each subset; (c) forming a second group of subsets of the nucleic acid tags of step (b) by contacting said nucleic acid tags with a plurality of second immobilized nucleotide sequences, each designed to capture a subset of nucleic acid tags by hybridization between one said second hybridization sequences and the second immobilized sequence; and (d) carrying out the second synthetic step by reacting the reagent-specific compound intermediate of the nucleic acid tag in each of the subsets formed in (c) with a selected one of a plurality of second reagents.

The structural limitation of each nucleic acid tags comprises a first hybridization sequences linked to a second hybridization sequences and the second hybridization sequences is linked to a chemical reaction site.

The structural limitation of each nucleic acid tags in each subset have selected one of a plurality of different first hybridization sequences and a mixture of different second hybridization sequences.

Claim Objections

8. Claim 10 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim 9. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The instant claim 10 reference that the ‘nucleic acid tags have one of a plurality of spacer sequences, each of said spacer sequences having a unique restriction enzyme site’. However, the limitation “spacer sequences” and/or the step of ‘adding’ the “spacer

sequences" are not recited in either claim 1, claim 8, or claim 9. It is suggested that applicant amend claim 10 to depend on claim 7 to overcome the objection.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 1, 3-10, 15, and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) at the time the application was filed had possession of the claimed invention. This is a written description rejection.

The instant invention recites a method of tag-directed synthesis of a plurality of compounds. The method comprises the steps of (a) forming a first group of subsets of nucleic acid tags for participating in a first synthetic reaction step by contacting said nucleic acid tags with a plurality of first immobilized nucleotide sequences, each designed to capture a subset of tags by hybridization between one of the first hybridization sequences and the first immobilized sequence; (b) carrying out the first synthetic step by reacting the chemical reaction sites in each of the subsets formed in step (a) with a selected one of a plurality of first reagents such that the chemical reaction site in each tag is converted to a reagent-specific compound intermediate on the nucleic acid tag in each subset; (c) forming a second group of subsets of the nucleic acid tags of step (b) by contacting said nucleic acid tags with a plurality of second immobilized nucleotide

sequences, each designed to capture a subset of nucleic acid tags by hybridization between one of said second hybridization sequences and the second immobilized sequence; and (d) carrying out the second synthetic step by reacting the reagent-specific compound intermediate of the nucleic acid tag in each of the subsets formed in step (c) with a selected one of a plurality of second reagents.

Each nucleic acid tags comprises a first hybridization sequence linked to a second hybridization sequence, which the second hybridization sequence is linked to a chemical reaction site and where the nucleic acid tags in each subset each has a selected one of a plurality of different first hybridization sequences, and a mixture of different second hybridization sequences.

The specification disclosure does not sufficiently teach the instant claimed method especially the instant claimed method steps (c) and (d), i.e. '*(c) forming a second group of subsets of the nucleic acid tags of step (b); and (d) carrying out the second synthetic step by reacting the reagent-specific compound intermediate of the nucleic acid tag in each of the subsets formed in (c) with a selected one of a plurality of second reagents*

The instant specification description is directed to two distinct methods that are the method of DNA templated split 'synthesis' for making subsets of nucleic acid tags (see instant specification page 14, line 29 thru page 15 line 15) and the method of synthetic coupling reaction of the subsets of nucleic acid tags (see instant specification page 15, line 25 thru page 16, line 18). The instant specification disclosure describe the term "nucleic acid tag" that is also termed "nucleic acid support" '*are defined herein to mean the nucleic acid sequences which comprise a plurality of different first hybridization sequences, a mixture of different second hybridization*

sequences, and a chemical reaction site' (see instant specification page 9, lines 14-18) and also as comprising '*a first segment having a selected one of a plurality of different first hybridization sequences, a mixture of different second hybridization sequences, and a chemical reaction site; and a second segment having a selected one of a plurality of different second hybridization sequences and a mixture of different first hybridization sequences*' (see instant specification page 11, lines 24-29).

The method of DNA templated split 'synthesis' disclose forming 10 different subsets of hybridized nucleic acid sequences from nucleic acid tag comprising 420 base pairs and 10 hybridization sequences (see instant specification page 14, lines 29-32). The method steps comprise pumping the entire pool of different nucleic acid tags over the linear sequence of affinity columns (i.e. hybridization sequences bound to the resin in the affinity columns), allowing the hybridization sequences of the nucleic acid tag to hybridize to the specific hybridization sequences bound to the column, and splitting (dividing) the nucleic acid tags bound to the column by breaking the luer-lock linkages between the affinity columns (see instant specification page 15, lines 1-8). The method further disclose making a second subset by using new affinity columns with different hybridization sequences bound to the resin and the "same" pool of different nucleic acid tags by repeating the method steps.

The method of synthetic coupling reaction of the subsets of nucleic acid tags comprises the method steps of transferring the subsets hybridized nucleic acid sequences in the affinity columns to the hydroxyapatite or sepharose columns such that the nucleic acid tags are non-covalently bound to the hydroxyapatite or sepharose resin (i.e. only the nucleic acid tags are eluted from the affinity columns), pumping into the hydroxyapatite or sepharose columns

organic reagents such as Fmoc-protected amino acid, reacting the organic reagents with the chemical reactive sites on the nucleic acid tags, and removing the Fmoc group from the amino acid, which form a new primary amine on the amino acid for the next coupling step (see instant specification page 15, line 25 thru page 16, line 18). The instant specification further recites that '*Each subset of nucleic acid tags formed by hybridization is subjected to a different synthetic coupling reaction*' (see specification page 15, lines 25-26), i.e. the subset of nucleic acid tags are first formed before they are subjected to the method of synthetic coupling reaction.

Neither of these methods disclose the instant claimed step (c) (i.e. '*(c) forming a second group of subsets of the nucleic acid tags of step (b)*'') of forming a second subset of '*nucleic acid tags*' after the synthetic coupling reaction of the instant claimed step (b) (i.e. '*(c) forming a second group of subsets of the nucleic acid tags of step (b)*'') and follow by another synthetic coupling reaction of the instant claimed step (d) (i.e. '*(d) carrying out the second synthetic step by reacting the reagent-specific compound intermediate of the nucleic acid tag in each of the subsets formed in (c) with a selected one of a plurality of second reagents*''). Therefore, these methods clearly do not provide an adequate representation regarding the instant claimed method especially the instant claimed method steps (c) and (d), i.e. '*(c) forming a second group of subsets of the nucleic acid tags of step (b); and (d) carrying out the second synthetic step by reacting the reagent-specific compound intermediate of the nucleic acid tag in each of the subsets formed in (c) with a selected one of a plurality of second reagents*''. And the instant specification does not teach the instant claimed method of tag-directed synthesis of a plurality of compounds.

Vas-Cath Inc. v. Mahurkar, 19 USPQ2d 1111, makes clear that "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession *of the invention*. The invention is, for purposes of the 'written description' inquiry, *whatever is now claimed.*" (See page 1117.) The specification does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." (See page 1116.).

With the exception of the method of DNA templated split 'synthesis' for making subsets of nucleic acid tags (see instant specification page 14, line 29 thru page 15 line 15) and the method of synthetic coupling reaction of the subsets of nucleic acid tags (see instant specification page 15, line 25 thru page 16, line 18) disclosed by the specification, the skilled artisan cannot envision the instant claimed method especially the instant claimed method steps (c) and (d), i.e. '*(c) forming a second group of subsets of the nucleic acid tags of step (b); and (d) carrying out the second synthetic step by reacting the reagent-specific compound intermediate of the nucleic acid tag in each of the subsets formed in (c) with a selected one of a plurality of second reagents*'. Adequate written description requires more than a mere statement that it is part of the invention and reference to a potential synthesis methods. See also *Univ. of Rochester v. G.D. Searle & Co.*, 358 F.3d 916, 920-23, 69 USPQ2d 1886, 1890-93 (Fed. Cir. 2004)(discussing history and purpose of the written description requirement); *In re Curtis*, 354 F.3d 1347, 1357, 69 USPQ2d 1274, 1282 (Fed. Cir. 2004); and *In re Barker*, 559 F.2d 588, 592 n.4, 194 USPQ 470, 473 n.4 (CCPA 1977).

Finally, University of California v. Eli Lilly and Co., 43 USPQ2d 1398, 1404, 1405 held that:

...To fulfill the written description requirement, a patent specification must describe an invention and do so in sufficient detail that one skilled in the art can clearly conclude that "the inventor invented the claimed invention." *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (1997); *In re Gosteli*, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989) (" [T]he description must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed."). Thus, an applicant complies with the written description requirement "by describing the invention, with all its claimed limitations, not that which makes it obvious," and by using "such descriptive means as words, structures, figures, diagrams, formulas, etc., that set forth the claimed invention." *Lockwood*, 107 F.3d at 1572, 41 USPQ2d at 1966.

In the present instance, the specification does not teach the instant claimed method steps (c) and (d), i.e. '(c) forming a second group of subsets of the nucleic acid tags of step (b); and (d) carrying out the second synthetic step by reacting the reagent-specific compound intermediate of the nucleic acid tag in each of the subsets formed in (c) with a selected one of a plurality of second reagents'. Therefore, only the method of DNA templated split 'synthesis' for making subsets of nucleic acid tags (see instant specification page 14, line 29 thru page 15 line 15) and the method of synthetic coupling reaction of the subsets of nucleic acid tags (see instant specification page 15, line 25 thru page 16, line 18), but not the full breadth of the instant claim method meet the written description provision of 35 U.S.C 112, first paragraph.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1, 3-10, 15, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) The instant claimed step (a) of claim 1 is vague and indefinite because the structural feature resulting from the claimed step (a) is different from the claimed 'nucleic acid

tag'. The instant claimed step (a) recites '*forming a first group of subsets of nucleic acid tags for participating in a first synthetic reaction step by contacting said nucleic acid tags with a plurality of first immobilized nucleotide sequences, each designed to capture a subset of tags by hybridization between one of the first hybridization sequences and the first immobilized sequence*', which would produce a subset of hybridized nucleotide sequences between the "*first hybridization sequences*" of the claimed '*nucleic acid tag*' and the "*first immobilized sequence*". This is different from the instant claimed structural feature of the subset of nucleic acid tags (i.e. '*each nucleic acid tags in each subset have selected one of a plurality of different first hybridization sequences and a mixture of different second hybridization sequences*'). It is unclear as to how the "*second hybridization sequences*" appear in this claimed subset of nucleic acid tags produce by instant claimed step (a) of claim 1 since the reaction is between the "*first hybridization sequences*" of the claimed '*nucleic acid tag*' and the "*first immobilized sequence*". Therefore, the instant claimed step (a) of claim 1 is vague and indefinite and claim 1 and all its dependent claims are rejected under 112, second paragraph.

b) The instant claimed step (a) of claim 1 is vague and indefinite because the structural feature resulting from the claimed step (a) is different from the claimed '*nucleic acid tag*'. The instant claimed step (a) recites '*forming a first group of subsets of nucleic acid tags for participating in a first synthetic reaction step by contacting said nucleic acid tags with a plurality of first immobilized nucleotide sequences, each designed to capture a subset of tags by hybridization between one of the first hybridization*

sequences and the first immobilized sequence', which would produce a subset of hybridized nucleotide sequences between the "first hybridization sequences" of the claimed 'nucleic acid tag' and the "first immobilized sequence". This is different from the instant claimed structural feature of nucleic acid tags (i.e. 'each nucleic acid tags comprises a first hybridization sequences linked to a second hybridization sequences and the second hybridization sequences is linked to a chemical reaction site'). It is unclear as how the "second hybridization sequences" and "chemical reaction site" appear in this claimed subset of nucleic acid tags produce by instant claimed step (a) of claim 1 since the reaction is between the "first hybridization sequences" of the claimed 'nucleic acid tag' and the "first immobilized sequence". Therefore, the instant claimed step (a) of claim 1 is vague and indefinite and claim 1 and all its dependent claims are rejected under 112, second paragraph.

- c) The instant claimed step (b) of claim 1 is vague and indefinite because the product of the instant claimed step (a) is use to react with the plurality of first reagents such that it convert '*the chemical reaction site in each tag to a reagent-specific compound intermediate on the nucleic acid tag in each subset*'. However, the product produced from instant claimed step (a) is a subset of hybridized nucleotide sequences between the "first hybridization sequences" of the claimed 'nucleic acid tag' and the "first immobilized sequence". The instant claimed 'chemical reaction site' is linked to the "second hybridization sequences". It is unclear how '*the chemical reaction site in each tag*' is converted to '*a reagent-specific compound intermediate on the nucleic acid tag in each subset*' when the product produce from instant claimed step (a) is a subset of

hybridized nucleotide sequences between the “*first hybridization sequences*” of the claimed ‘*nucleic acid tag*’ and the “*first immobilized sequence*”. Thus, the instant claimed step (b) of claim 1 is vague and indefinite.

- d) The instant claimed step (c) of claim 1 is vague and indefinite because the product of the instant claimed step (b) (i.e. *reagent-specific compound intermediate*) is use to react with the plurality of second immobilized nucleotide sequences to produce a second group of nucleic acid tags wherein the product produce is a subset of hybridized nucleotide sequences between the “*second hybridization sequences*” and the “*second immobilized sequence*”. However, the product produced in step (b) is a ‘*reagent-specific compound intermediate*’, which result from converting the ‘*chemical reaction site*’ with the ‘*first reagent*’. It is unclear how the product produced in step (b) would hybridize to the “*second immobilized sequence*”. Thus, the instant claimed step (c) of claim 1 is vague and indefinite.
- e) The instant claimed step (d) of claim 1 is vague and indefinite because the product of the instant claimed step (c) (i.e. a subset of hybridized nucleotide sequences between the “*second hybridization sequences*” and the “*second immobilized sequence*”) is use to react with a plurality of second reagents. It is unclear how the product produced in step (c) would react with a plurality of second reagents since the product produced in step (c) is the hybridized nucleotide sequences between the “*second hybridization sequences*” and the “*second immobilized sequence*”. Thus, the instant claimed step (d) of claim 1 is vague and indefinite.

13. Claim 10 recites the limitation "spacer sequences" in line 2. There is insufficient antecedent basis for this limitation in the claims 1, 8 and 9 because the limitation "spacer sequences" is not recited in either claim 1, claim 8, or claim 9. Therefore, claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite. It is suggested that applicant amend claim 10 to depend on claim 7 to overcome the rejection.

14. Claims 1, 3-10, 15, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted step(s) between the instant claimed step (b) and (c).

The instant claimed step (b) recites the step of carrying out the first synthetic step by reacting the chemical reaction sites in each of the subsets formed in step (a) with a selected one of a plurality of first reagents such that the chemical reaction site in each tag is converted to a reagent-specific compound intermediate on the nucleic acid tag in each subset. The instant claimed step (c) recites the step of forming a second group of subsets of the nucleic acid tags of step (b) by contacting said nucleic acid tags with a plurality of second immobilized nucleotide sequences, each designed to capture a subset of nucleic acid tags by hybridization between one of said second hybridization sequences and the second immobilized sequence. There is a gap between steps (b) and (c) because in this case the product produce in step (b) is a reagent-specific compound intermediate and yet in step (c) the product is a subset of hybridized nucleotide sequences between the "*second hybridization sequences*" and the "*second immobilized sequence*". It is unclear as to what happen to the product produce in step (b) (i.e. reagent-specific compound intermediate) and/or how it is the 'starting' material to produce the product of

step (c) since the reaction is between the “*second hybridization sequences*” of the nucleic acid tags and the “*second immobilized sequence*”.

Therefore, there is a gap between steps (b) and (c) and the instant claimed method is incomplete.

15. Claims 1, 3-10, 15, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps.

See MPEP § 2172.01. The omitted step(s) between the instant claimed step (c) and (d).

The instant claimed step (c) recites the step of forming a second group of subsets of the nucleic acid tags of step (b) by contacting said nucleic acid tags with a plurality of second immobilized nucleotide sequences, each designed to capture a subset of nucleic acid tags by hybridization between one of said second hybridization sequences and the second immobilized sequence. The instant claimed step (d) recites the step of carrying out the second synthetic step by reacting the reagent-specific compound intermediate of the nucleic acid tag in each of the subsets formed in step (c) with a selected one of a plurality of second reagents. There is a gap between steps (c) and (d) because in this case the product produce in step (c) is the hybridized nucleotide sequences between the “*second hybridization sequences*” and the “*second immobilized sequence*” and *not ‘the reagent-specific compound intermediate’* as claimed in step (d). It is unclear as to what happen to the product produce in step (c) (i.e. the hybridized nucleotide sequences between the “*second hybridization sequences*” and the “*second immobilized sequence*”)) and how does step (c) produce the ‘starting’ material of ‘*the reagent-*

specific compound intermediate' as claimed in step (d) from the reaction between the second hybridization sequences of the nucleic acid tags and the second immobilized sequence.

Withdrawn Rejection(s)/ Response to Arguments

16. The rejections of claims 1, 3-10, 15, and 16 under 35 USC 112, second paragraph, as being indefinite have been withdrawn in light of applicant's argument (see page 6 of argument under the heading of immobilized sequences) and amendments of claim 1 (i.e. the additional limitation of '*each nucleic acid tags comprises a first hybridization sequences linked to a second hybridization sequences and the second hybridization sequences is linked to a chemical reaction site*').

17. The rejection of claims 1, 3-5, and 15 under 35 USC 102(b) as being anticipated by Dehlinger (US Patent 5,723,320) has been withdrawn in light of applicant's amendments of claim 1 (i.e. the additional limitation of '*each nucleic acid tags comprises a first hybridization sequences linked to a second hybridization sequences and the second hybridization sequences is linked to a chemical reaction site*').

Furthermore, applicant's arguments with respect to claims 1, 3-5, and 15 under 35 USC 102(b) as being anticipated by Dehlinger (US Patent 5,723,320) have been considered but are moot in view of the amendments of claim 1 (i.e. the additional limitation of '*each nucleic acid tags comprises a first hybridization sequences linked to a second hybridization sequences and the second hybridization sequences is linked to a chemical reaction site*').

18. No claims allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Chau T. Tran whose telephone number is 571-272-0810. The examiner can normally be reached on Monday: 8:00-2:30; Tuesday-Thursday: 7:30-5:00; Friday: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mct
January 30, 2006



PADMASHRI PONNALURI
PRIMARY EXAMINER